Project Title	Funding	Institution
Neurobiological Mechanism of 15q11-13 Duplication Autism Spectrum Disorder	$380,625	BETH ISRAEL DEACONESS MEDICAL CENTER
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	$0	King's College London
Genetic and Developmental Analyses of Fragile X Mental Retardation Protein	$383,322	Vanderbilt University
A Quantitative Study of Pyramidal Cells and Interneurons in the Cerebral Cortex	$3,000	UNIVERSITY OF SOUTH CAROLINA
Tet-mediated Epigenetic Modulation in Autism	$603,129	Emory University
Rescuing synaptic and circuit deficits in an Angelman syndrome mouse model	$60,000	Arizona Board of Regents, University of Arizona
Language Development in Fragile X Syndrome	$495,501	University of California, Davis
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	$0	Children's Hospital of Philadelphia
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	$0	Boston Children's Hospital
Characterizing 22q11.2 abnormalities	$62,498	Children's Hospital of Philadelphia
Dysregulation of Protein Synthesis in Fragile X Syndrome and Other Developmental Disorders	$1,221,847	National Institutes of Health
Neuronal translation in Tsc2+/- and Fmr1-/y mutant ASD mouse models	$62,500	The Trustees of Columbia University in the City of New York
Presynaptic Fragile X Proteins	$249,000	DREXEL UNIVERSITY
Genetic Modifiers of Seizure Disorders in Fragile X Syndrome	$261,539	Emory University
Synaptic Phenotype, Development, and Plasticity in the Fragile X Mouse	$395,642	MICHIGAN STATE UNIVERSITY
Rapid screening for cortical circuit dysfunction in autism-related mouse models	$0	University of California, Berkeley
Dysregulation of mTOR Signaling in Fragile X Syndrome	$250,167	ALBERT EINSTEIN COLLEGE OF MEDICINE
Dysregulation of mTOR Signaling in Fragile X Syndrome	$164,833	ALBERT EINSTEIN COLLEGE OF MEDICINE
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	$100,000	University of Washington
Chloride homeostasis and GABA maturation in fragile X syndrome	$231,750	Northwestern University
Mechanisms of Motor Skill Learning in the Fragile X Mouse Model	$300,434	University of Nebraska
Multigenic basis for autism linked to 22q13 chromosomal region	$125,000	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY
Dendritic 'translatome' in fragile X syndrome and autism	$0	University of Michigan
Novel candidate mechanisms of fragile X syndrome	$248,235	UNIVERSITY OF MICHIGAN
Probing synaptic receptor composition in mouse models of autism	$124,998	Boston Children's Hospital
Probing the neural basis of social behavior in mice	$0	Massachusetts Institute of Technology
BDNF and the Restoration of Synaptic Plasticity in Fragile X and Autism	$455,630	University of California, Irvine
FMRP regulates the pruning of cell-to-cell connections in the neocortex	$79,500	UT SOUTHWESTERN MEDICAL CENTER
Neurotrophic Factor Regulation of Gene Expression	$618,134	Harvard University
Neuronal Activity-Dependent Regulation of MeCP2	$600,383	Harvard University

Project Title	Funding	Institution
Genotype-Phenotype Relationships in Fragile X Families	$633,789	University of California, Davis
Mechanisms of synapse elimination by autism-linked genes	$0	University of Texas Southwestern Medical Center
Mechanisms of mGluR5 function and dysfunction in mouse autism models	$410,720	UT SOUTHWESTERN MEDICAL CENTER
Role of MEF2 and neural activity in cortical synaptic weakening and elimination	$388,354	UT SOUTHWESTERN MEDICAL CENTER
Cortico-striatal dysfunction in the eIF4E transgenic mouse model of autism	$62,497	New York University
A Family-Genetic Study of Autism and Fragile X Syndrome	$597,808	Northwestern University
A Family-Genetic Study of Autism and Fragile X Syndrome	$393,739	Northwestern University
Longitudinal MRI Study of Brain Development in Fragile X	$769,619	STANFORD UNIVERSITY
Cortactin and Spine Dysfunction in Fragile X	$33,763	University of California, Irvine
Motor cortex plasticity in MeCP2 duplication syndrome	$30,000	Baylor College of Medicine
Translational Regulation of Adult Neural Stem Cells	$372,633	University of Wisconsin
Coordinate actions between methyl-CpG binding proteins in neuronal development	$226,585	University of Wisconsin
Imaging of protein synthesis and ubiquitination in fragile x syndrome	$195,000	Emory University
Targeting the PI3K Enhancer PIKE to Reverse FXS-associated Phenotypes	$160,000	Emory University
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	$5,867	Case Western Reserve University
Neurobiology of Rai1, a critical gene for syndromic ASDs	$87,500	The Board of Trustees of the Leland Stanford Junior University (Stanford)
Emergence and Stability of Autism in Fragile X Syndrome	$358,000	UNIVERSITY OF SOUTH CAROLINA
Supplement to The Emergence and Stability of Autism in Fragile X Syndrome	$82,061	UNIVERSITY OF SOUTH CAROLINA
Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4	$0	University of North Carolina
New Models For Astrocyte Function in Genetic Mouse Models of Autism Spectrum Diso	$396,250	CLEVELAND CLINIC LERNER COM-CWRU
Mechanisms underlying the Cerebellar Contribution to Autism in Mouse Models of Tuberous Sclerosis Complex	$190,458	UT SOUTHWESTERN MEDICAL CENTER
MRI Biomarkers of Patients with Tuberous Sclerosis Complex and Autism	$727,821	CHILDREN'S HOSPITAL CORPORATION
Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders	$0	Massachusetts Institute of Technology
Linking genetic mosaicism, neural circuit abnormalities and behavior	$0	Brown University
Illuminating the role of glia in a zebrafish model of Rett syndrome	$62,500	The Regents of the University of California, San Diego
Cell-type and circuit-specific functional deficits in cortex from gene disruptions linked to autism	$30,000	University of North Carolina
Mechanisms underlying word learning in fragile X syndrome and nonsyndromic ASD	$156,333	University of California, Davis

Project Title	Funding	Institution
A mouse model for AUTS2-linked neurodevelopmental disorders	$189,187	University of Illinois
Potassium channels as therapeutic targets in autism	$60,000	Administrators of the Tulane Educational Fund
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	$0	Nemours Children's Health System, Jacksonville
Undergraduate Research Award	$3,000	Texas A&M University
Calcium Channels as a Core Mechanism in the Neurobiology of ASD	$35,000	Massachusetts General Hospital
Dysregulation of mTor/Tsc in 22q11DS Autism Model	$62,500	GEORGE WASHINGTON UNIVERSITY
A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome	$60,000	University of Nebraska
Fragile X syndrome target analysis and its contribution to autism	$124,725	Vanderbilt University
The role of Shank3 in neocortex versus striatum and the pathophysiology of autism	$0	Duke University
Role of GABA interneurons in a genetic model of autism	$0	Yale University
mTOR modulation of myelination	$179,659	Vanderbilt University
A Novel Essential Gene for Human Cognitive Function	$35,474	Harvard University
Mouse Model of Dup15q Syndrome	$32,635	Texas AgriLife Research
The role of UBE3A in autism: Is there a critical window for social development?	$54,450	Erasmus University Medical Center
Neural and cognitive discoordination in autism-related mouse models	$280,480	New York University
Translation, Synchrony, and Cognition	$380,953	New York University
Linking circuit dynamics and behavior in a rat model of autism	$0	University of California, San Francisco
Analysis of MEF2 in Cortical Connectivity and Autism-Associated Behaviors	$56,042	McLean Hospital
Pragmatic language and social-emotional processing in autism, fragile X, and the FMR1 premutation	$0	Northwestern University
Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder	$30,000	Cold Spring Harbor Laboratory
Role of UBE3A in the Central Nervous System	$321,269	University of North Carolina
16p11.2 rearrangements: Genetic paradigms for neurodevelopmental disorders	$100,000	University of Lausanne
THE ROLE OF MECP2 IN RETT SYNDROME	$356,699	University of California, Davis
BAZ1B Haploinsufficiency and the Neuro-phenotypes of Williams Syndrome	$59,000	The Regents of the University of California, Santa Barbara
Profiles and Predictors of Pragmatic Language Impairments in the FMR1 Premutation	$55,796	UNIVERSITY OF SOUTH CAROLINA
FMRP and Pumilio co-regulate synaptogenesis by controlling Neuroglian expression	$27,480	Vanderbilt University
Translational dysregulation in autism pathogenesis and therapy	$250,000	Massachusetts General Hospital

Project Title	Funding	Institution
Effects of Social Gaze Training on Brain and Behavior in Fragile X Syndrome	$352,066	STANFORD UNIVERSITY
Testing the ribosomal protein S6 as treatment target and biomarker in autism spectrum disorders	$0	Cincinnati Children's Hospital
PPAR/SIRT1 PATHWAY IN C. ELEGANS	$22,740	Children's Hospital of Philadelphia
Thalamocortical circuit defects in developmental brain disorders	$490,462	University of Maryland
Astrocytes contribution to tuberous sclerosis pathology	$208,125	Yale University
The Role of Glia in Fragile X Syndrome	$0	Johns Hopkins University
MAGEL2, a candidate gene for autism and Prader-Willi syndrome	$105,977	University of Alberta
Development and afferent regulation of auditory neurons	$376,200	Florida State University
Dysregulation of Mdm2-mediated p53 ubiquitination in autism mouse models	$0	University of Illinois at Chicago
Probing the Molecular Mechanisms Underlying Autism: Examination of Dysregulated Protein Synthesis	$0	National Institutes of Health
Modeling Microglial Involvement in Autism Spectrum Disorders, with Human Neuro-glial Co-cultures	$30,000	Whitehead Institute for Biomedical Research
Mechanisms and Rescue of Neural Circuit Dysfunction in Mecp2 Mutant Mice	$92,578	Baylor College of Medicine
Mapping the Neurobehavioral Phenotype in Phelan McDermid Syndrome	$0	ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
Dissecting the 16p11.2 CNV endophenotype in induced pluripotent stem cells	$54,400	University of California, San Francisco
Investigating the role of Tsc1 in neocortical circuit assembly	$52,406	STANFORD UNIVERSITY
Identification of TSC cellular phenotypes using patient-derived iPSCs	$193,750	Rutgers University
Neuropathology of the Shank3 mouse model for autism	$0	University of Louisville